



RECEIVED  
MAY 29 2007  
TECH CENTER 1600/2900

**THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEE FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975.**

23. (New) A process for the preparation of optically and chemically highly pure (*R*)- and (*S*)- $\alpha$ -hydroxycarboxylic acids, which consists essentially of recrystallizing impure (*R*)- and (*S*)- $\alpha$ -hydroxycarboxylic acids, prepared by acidic hydrolysis of the (*R*)- and (*S*)-cyanohydrins obtained by enzyme-catalyzed addition of a cyanide group to the corresponding aldehydes or ketones, in an aromatic hydrocarbon, optionally in the presence of a co-solvent, to form an organic phase and wherein the co-solvent increases the solubility of the hydroxycarboxylic acids in said organic phase, and obtaining

23  
concl'd

optically and chemically highly pure (*R*)- and (*S*)- $\alpha$ -hydroxycarboxylic acids having an optical purity of over 98%ee.

---